

**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**Departmental Program Structure and Outcome Measures**



AIR
WATER
ENERGY
FOREST PRESERVATION
COMPLIANCE
OUTREACH
SOLID WASTE

**Mission:** *To protect and enhance the quality of life in our community through the conservation, preservation, and restoration of our environment guided by principles of science, resource management, sustainability, and stewardship.*

Outcome-based accountability in environmental protection is built on a commitment to ensure that every dollar spent works toward improving the conditions of the environment in Montgomery County. If the Department of Environmental Protection is to be accountable, we must be able to demonstrate that our programs make a difference in the lives of the people we serve.

**DEPARTMENTAL OUTCOMES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Ambient Air</b>					
Number of days the County is in noncompliance with National Ambient Air Quality Standards for ozone	3	3	8	5	TBD
<b>Indoor Air</b>					
Percentage of County homes with radon level below EPA recommended action level <sup>a</sup>	NA	64	60	63	63
<b>Water</b>					
Percentage of residential stormwater facilities in County's Water Quality Protection Charge Program <sup>b</sup>	NA	NA	32	30	30
Percentage of County groundwater meeting drinking water standards <sup>c</sup>	NA	NA	NA	86	TBD
Percentage of CSPS subwatersheds monitored in fiscal year with an improved rating <sup>d</sup>	NA	14.7	6.2	30	15
<b>Energy</b>					
Percentage change in residential energy consumption <sup>e</sup>	+8	+3	12	-12	-13
Percentage change in non-residential energy consumption <sup>e</sup>	+6	-4	19	-12	-13
<b>Forest Preservation</b>					
Percentage of County meeting urban/suburban tree canopy cover goals <sup>g</sup>	NA	NA	25	25	25
<b>Compliance</b>					
Number of environmental complaints received by the Department of Environmental Protection	1,545	1,404	1,541	1,525	1,600
<b>Outreach</b>					
Number of website hits on Department of Environmental Protection home page	281,424	338,829	3,200,000	500,000	TBD
<b>Solid Waste</b>					
Percentage of County solid waste facilities in compliance with State and Federal standards <sup>f</sup>	80	60	80	100	100

**Notes:**

<sup>a</sup>FY02 and subsequent data are from a County Department of Environmental Protection radon survey program.

<sup>b</sup>This program, which began in March, 2002, is designed to ensure that the County covers the costs needed to meet Federal stormwater management regulations. The Water Quality Protection Charge shifts stormwater maintenance costs from private to public funding: a charge based on a property's impervious area has appeared on the property tax bill since July 2002. Property owners can also choose to have the County maintain stormwater facilities on their property by entering them into the Water Quality Protection Charge Program.

<sup>c</sup>The percentage of County groundwater meeting drinking water standards will be determined by implementing the Baseline Monitoring Program recommended by the Groundwater Protection Strategy Work Group.

<sup>d</sup>The Countywide Stream Protection Strategy (CSPS) ranks streams based on biological life supported (fish, aquatic insects) and channel habitat conditions as monitored at 300 stations. About 20% of the stations are sampled each year, enabling reevaluation of stream conditions over a five-year cycle.

<sup>e</sup>Percentage increase or decrease in per capita consumption of fossil fuels from 1995 base year (from Montgomery County Department of Finance).

<sup>f</sup>"Residential" includes all uses of energy for residential purposes. "Non residential" includes all industrial and commercial energy use in the County. Transportation fuels are not included in this analysis.

<sup>g</sup>FY02 Solid Waste Compliance was *budgeted* at 80%, but continued problems at Oaks and the Dickerson Yard Trash Compost Facility reduced the actual rate of compliance in FY02 to 60%.

<sup>h</sup>The percentage of the County meeting urban/suburban tree canopy coverage goals is estimated; information is not yet available for 20% of the County.

## ENVIRONMENTAL PROTECTION

<b>PROGRAM:</b> Environmental Policy and Compliance	<b>PROGRAM ELEMENT:</b> Compliance Monitoring at County Division of Solid Waste Services Facilities
--	--

**PROGRAM MISSION:**

To assure that County solid waste facilities are in compliance with Federal, State, and local environmental regulations and permits

**COMMUNITY OUTCOMES SUPPORTED:**

- Effective and efficient operation of County waste facilities
- Reduced pollution of County air, streams, and groundwater, and enhancement of the environment

PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
Percentage of facilities in compliance	80	80	80	100	100
Number of violations	2	1	1	0	0
<b>Service Quality:</b>					
Ratio of actual to planned samples collected <sup>a,d</sup>	1.12	1.25	0.85	1.00	1.00
<b>Efficiency:</b>					
Samples collected per workyear <sup>b</sup>	105.7	71.3	143.2	176.1	198.1
Average laboratory cost per sample (\$) <sup>c</sup>	598	387	108	103	103
<b>Workload/Outputs:</b>					
Number of environmental samples collected <sup>d</sup>	645	385	806	949	949
<b>Inputs:</b>					
Laboratory/consultant expenditures (\$000)	386	149	87	98	98
Workyears <sup>e</sup>	6.1	5.4	5.6	5.4	4.8

**Notes:**

<sup>a</sup>More than 100% of planned samples were collected in FY01 and FY02 due to a need for additional methane sampling at the Beantown Dump and the Oaks Landfill.

<sup>b</sup>The number of samples collected per workyear can vary greatly due to unexpected requirements for more intensive monitoring and special studies.

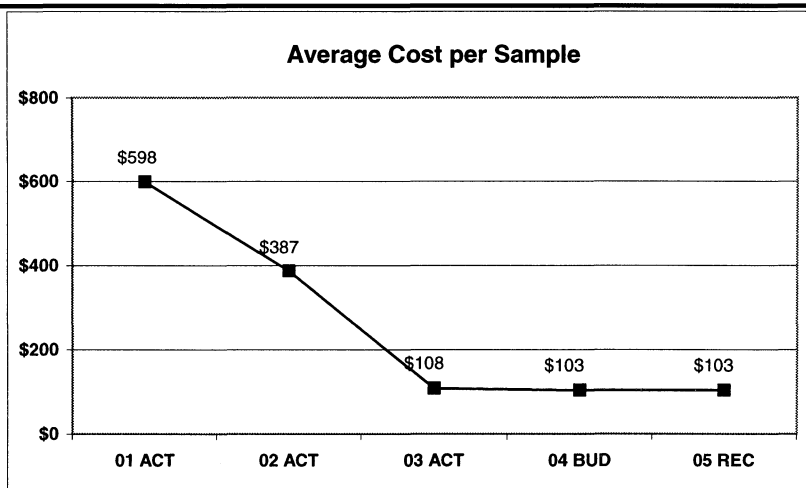
<sup>c</sup>The average laboratory cost per sample analyzed depends on the types of tests being undertaken and their relative proportions. For example, nitrate tests cost about \$15 each, whereas Dioxin tests can cost as much as \$1,600 each. The reduction in cost per sample is due to a new lab contract and a large increase in methane samples which are measured in the field.

<sup>d</sup>FY03 and FY04 sampling of the Beantown Dump was less than expected because design changes reduced the number of vents by 12%.

<sup>e</sup>Workyears include only County program staff.

**EXPLANATION:**

This program monitors County solid waste facilities run by the Division of Solid Waste Services (DSWS) in the Department of Public Works and Transportation for compliance with Federal, State, and local environmental regulations. Five facilities are monitored: the Oaks Landfill, the Gude Landfill, the Transfer Station, the Resource Recovery Facility, and the Dickerson Yard Trim Composting Facility. The Department of Environmental Protection (DEP) acts as both an environmental monitor and a technical consultant to DSWS. Despite DEP's limited direct authority to influence outcomes (other than the negative one of noting and citing violations), DEP has forged a successful relationship with DSWS in creating a solid waste management system that protects both human health and the environment.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Division of Solid Waste Services, Office of the County Attorney, Oaks Landfill Advisory Commission, Sugarloaf Citizens Association.

**MAJOR RELATED PLANS AND GUIDELINES:** Resource Conservation and Recovery Act Permit, Federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, County 10-Year Solid Waste Plan, County Stream Protection Strategy, Federal Clean Air Act, Resource Recovery Facility Air Permit, Oaks Final Closure Plan, New Beantown Dump Guidelines.

# ENVIRONMENTAL PROTECTION

**PROGRAM:**

Environmental Policy and Compliance

**PROGRAM ELEMENT:**

Enforcement of Environmental Codes

**PROGRAM MISSION:**

To reduce pollution and improve environmental quality by enforcing environmental codes and regulations through education, public outreach, proactive initiatives, mandatory monitoring, and enforcement activities using the latest scientific techniques and equipment

**COMMUNITY OUTCOMES SUPPORTED:**

- Improve environmental quality through enforcement
- Reduce pollution and improve the quality of life
- Provide timely and responsive service

**PROGRAM MEASURES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 ESTIMATED	FY05 CE REC
<b>Outcomes/Results:</b>					
Number of notices of violation issued <sup>a</sup>	296	254	198	225	250
Number of civil citations issued <sup>a</sup>	74	15	54	50	50
<b>Service Quality:</b>					
Percentage of customers satisfied with service <sup>b</sup>	83	92	82	90	90
Percentage of cases resolved within 90 days	75	70	79	80	80
<b>Efficiency:</b>					
Average number of cases per investigator	258	234	257	320	320
Average cost per case (\$)	388	481	494	362	331
<b>Workload/Outputs:</b>					
Number of cases	1,545	1,404	1,541	1,600	1,920
<b>Inputs:</b>					
Expenditures - salaries (\$000) <sup>c</sup>	600	675	761	579	636
Workyears <sup>c</sup>	8.2	8.4	8.4	6.5	7.5

**Notes:**

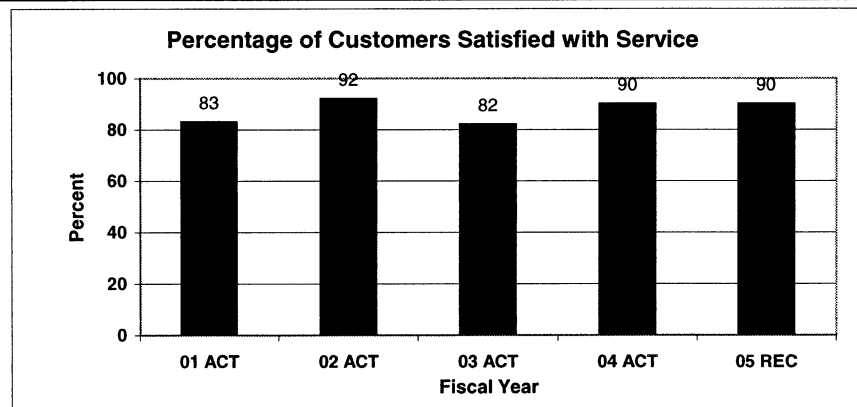
<sup>a</sup>Notices of violation are designed to warn an individual or organization that it is violating the environmental codes. If a notice of violation goes unheeded, or if the initial violation involves blatantly illegal activity, a civil citation - with a \$500 fine - can be issued.

<sup>b</sup>In FY01 and FY02, 20 percent of closed cases received a customer survey; the response rate was 25% in FY01 and 39% in FY02. In FY03, 50 percent of closed cases were surveyed, and the response rate was 24%.

<sup>c</sup>Some of these staff also perform compliance monitoring at County Division of Solid Waste Services facilities (as reported in the preceding program measures display). Since the latter employees have multiple responsibilities and funding sources, it is not possible to accurately allocate the workyears and expenditures between compliance monitoring at County Solid Waste Services facilities and the code enforcement efforts that are the focus of this program element.

**EXPLANATION:**

The Department of Environmental Protection investigates between 1,200 and 1,500 complaints each year related to air quality, water quality, noise, illegal dumping, and hazardous waste. This chart shows the percentage of customers satisfied with the Department's response to their complaints. It is based on information returned from a customer satisfaction survey. The survey was initiated on February 1, 1997, and the number of questionnaires mailed has increased each year. Survey cards are only sent to customers who provided the Department of Environmental Protection with complete address information.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Maryland Department of the Environment, Department of Permitting Services, Department of Housing and Community Affairs, Office of the County Attorney, Office of the State's Attorney, Environmental Protection Agency, Montgomery County Police, Montgomery County Fire and Rescue Service.

**MAJOR RELATED PLANS AND GUIDELINES:** Montgomery County Code Chapters 3, 19, 28, 31B, and 48; COMAR; Federal Clean Water Act; National Pollutant Discharge Elimination System Permit.

# ENVIRONMENTAL PROTECTION

**PROGRAM:**

Environmental Policy and Compliance

**PROGRAM ELEMENT:**

Stormwater Facility Maintenance Inspections

**PROGRAM MISSION:**

To ensure the safety of all publicly- and privately-owned stormwater management facilities, and to protect local streams as required by County, State, and Federal regulations

**COMMUNITY OUTCOMES SUPPORTED:**

- Protection of streams from stream bank erosion
- Protection of aquatic life from sediment and associated pollution
- Protection of public safety and restoration of vital infrastructure

**PROGRAM MEASURES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
Percentage of stormwater facilities requiring repair <sup>a</sup>					
- Triennial inspections (ponds and other above ground structures) <sup>b</sup>	99	99	98	50	50
- Annual inspections (underground structures, water quality inlets, etc.) <sup>c</sup>	59	71	89	50	50
<b>Service Quality:</b>					
Percentage of mandated triennial inspections completed	100	100	100	100	100
<b>Efficiency:</b>					
Cost per facility inspected (\$) <sup>d</sup>	480	480	417	400	400
<b>Workload/Outputs:</b>					
Number of inspections completed					
- Triennial inspections	60	197	439	530	550
- Annual inspections	<u>707</u>	<u>742</u>	<u>702</u>	<u>1,317</u>	<u>1,324</u>
Total inspections	767	939	1,141	1,847	1,874
<b>Inputs:</b>					
Expenditures - inspections (\$000) <sup>e</sup>	355	440	476	<sup>9</sup> 739	750
Expenditures - other program costs (\$000) <sup>f</sup>	13	11	55	0	0

**Notes:**

<sup>a</sup>The NPDES (National Pollutant Discharge Elimination System) permit specifies requirements for inspection and maintenance of stormwater management facilities throughout the County.

<sup>b</sup>The Federal Environmental Protection Agency and the Maryland Department of the Environment NPDES permit require triennial inspections of ponds and other above-ground stormwater facilities. The triennial cycle began again in FY02.

<sup>c</sup>Department of Environmental Protection policy and the County Code require annual inspections of underground structures, water quality inlets, etc.

<sup>d</sup>Only contractual inspection costs are included in this measure.

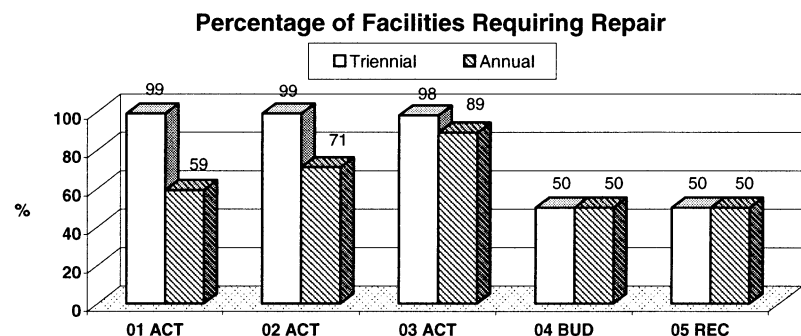
<sup>e</sup>Expenditures for inspections include only contractual costs (all inspections are performed by contractors). The contracts are monitored by Department of Environmental Protection staff, whose costs and workyears are not shown.

<sup>f</sup>After FY03, these other program costs are included in the display for the Stormwater Facility Maintenance program.

<sup>9</sup>This increase reflects the increase in the number of inspections to be conducted.

**EXPLANATION:**

The number of inspections conducted in connection with the Stormwater Facility Maintenance Program has increased steadily since FY01, and the inspection process has been refined as the program has matured. While recent results seem to indicate decreased compliance (e.g. a greater percentage of facilities in need of repair), this trend is expected to reverse with full implementation of the Stormwater Facility Maintenance Program.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Department of Permitting Services, Department of Housing and Community Affairs, Office of the County Attorney, Maryland-National Capital Park and Planning Commission, home owner associations, commercial property owners.

**MAJOR RELATED PLANS AND GUIDELINES:** Countywide Stream Protection Strategy, Federal Clean Water Act, National Pollutant Discharge Elimination System Municipal Stormwater Permit, Chapter 19 of the Montgomery County Code.

## ENVIRONMENTAL PROTECTION

<b>PROGRAM:</b> Stormwater Facility Maintenance	<b>PROGRAM ELEMENT:</b>				
<b>PROGRAM MISSION:</b> To ensure that all residential stormwater management facilities receive adequate maintenance to protect local streams and provide flood control as required by County, State, and Federal regulations					
<b>COMMUNITY OUTCOMES SUPPORTED:</b> <ul style="list-style-type: none"><li>• Protection of streams from stream bank erosion</li><li>• Protection of aquatic life from sediment and associated pollution</li><li>• Protection of public safety</li><li>• Restoration of vital infrastructure</li></ul>					
<b>PROGRAM MEASURES<sup>a</sup></b>	<b>FY01 ACTUAL</b>	<b>FY02 ACTUAL</b>	<b>FY03 ACTUAL</b>	<b>FY04 BUDGET</b>	<b>FY05 CE REC</b>
<b>Outcomes/Results:</b>					
Percentage of residential stormwater management facilities in the County that have joined the Stormwater Facility Maintenance Program	NA	NA	32	30	30
Percentage of residential stormwater management facilities in the County maintenance program that are adequately maintained and in compliance	NA	NA	10	100	100
<b>Service Quality:</b>					
Percentage of customers satisfied with service <sup>b</sup>	NA	NA	NA	85	85
<b>Efficiency:</b>					
Cost per facility repaired (\$)	NA	NA	10,000	<sup>e</sup> 4,200	4,200
Cost per facility in the Stormwater Facility Maintenance Program (\$)					
- Ponds	NA	NA	<sup>d</sup> 52,000	<sup>d</sup> 1,000	1,000
- Underground facilities	NA	NA	2,700	1,550	1,550
<b>Workload/Outputs:</b>					
Number of residential stormwater management facilities in the County	650	743	805	836	1,020
Number of facilities transferred to the Stormwater Facility Maintenance Program <sup>c</sup>	NA	NA	256	231	138
- Ponds	NA	NA	125	138	88
- Underground facilities	NA	NA	131	93	50
Number of facilities inspected	NA	9	44	115	135
Number of facilities repaired	NA	NA	48	<sup>e</sup> 207	250
Number of work orders processed	NA	NA	6	<sup>e</sup> 6	16
<b>Inputs:</b>					
Expenditures - inspection and maintenance (\$000)	NA	NA	850	1,271	2,870
Expenditures - staffing and other program costs (\$000)	NA	NA	<u>661</u>	<u>1,117</u>	<u>794</u>
Total expenditures (\$000)	NA	NA	1,511	2,388	3,664
Workyears	NA	NA	7.0	9.0	9.0
<b>Notes:</b>					
<sup>a</sup> This program was initiated in March, 2002.					
<sup>b</sup> Customer satisfaction survey cards will be mailed to citizens to assess service quality starting in FY04.					
<sup>c</sup> Only residential stormwater facilities or associated nonresidential stormwater facilities will be transferred into the Stormwater Facility Maintenance Program. Ponds owned by the Maryland-National Capital Park and Planning Commission that drain residential areas are included in the numbers.					
<sup>d</sup> Many of the ponds brought into the program in FY03 had never been maintained, which resulted in extensive initial maintenance needs and a high cost per pond. It is expected that facilities entering the program in subsequent years will be entering in as-built condition, with a correspondingly lower maintenance requirement.					
<sup>e</sup> Actual year-to-date results as of April 1, 2004.					
<b>EXPLANATION:</b>					
This program, which began in March, 2002, is designed to ensure that the County covers the costs needed to meet Federal stormwater management regulations. The relevant revisions to Chapter 19 of the Montgomery County Code were approved by the County Council on November 20, 2000. A Water Quality Protection Charge, based on a property's impervious area, has appeared on the property tax bill since July 2002. This has the effect of shifting stormwater maintenance costs from private to public funding. A portion of the Water Quality Protection Charge goes to fund the Stormwater Management Cost Sharing Program. This program is designed to facilitate repairs and upgrades of stormwater management structures belonging to private property owners by helping the owners restore the structures to their originally approved design standards or better if required under existing law (or if agreed to by the County and the property owner). Property owners can also choose to shift maintenance responsibilities to the County (at no additional cost) by enrolling their stormwater facilities in the County's Stormwater Facility Maintenance Program. Facilities must receive approval by the County before entering the Stormwater Facility Maintenance Program.					
<b>PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:</b> Department of Permitting Services, Department of Housing and Community Affairs, Department of Public Works and Transportation, Office of the County Attorney, homeowners' associations, commercial property owners, Maryland Department of the Environment, Environmental Protection Agency.					
<b>MAJOR RELATED PLANS AND GUIDELINES:</b> Countywide Stream Protection Strategy, Federal Clean Water Act, National Pollutant Discharge Elimination System Municipal Stormwater Permit, Code of Maryland Regulations.					

## ENVIRONMENTAL PROTECTION

**PROGRAM:**  
Watershed Management

**PROGRAM ELEMENT:**  
Countywide Forest Preservation Strategy

**PROGRAM MISSION:**

Protect and restore natural forest ecosystems and urban tree canopy to improve watershed protection and achieve other environmental, energy reduction, and cost-saving benefits

**COMMUNITY OUTCOMES SUPPORTED:**

- Increased tree and forest cover to enhance the quality of life and improve habitat for birds, aquatic, and terrestrial wildlife
- Moderation of thermal "heat island" effects from urban surfaces, reducing energy needs and heating/air conditioning costs
- Improved air and water quality from filtering of pollutants
- Moderation of runoff impacts through increased urban tree canopy and forest cover

**PROGRAM MEASURES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
Percentage of County meeting urban/suburban tree canopy goals <sup>a</sup>	NA	NA	25	25	25
Percentage of protected stream buffers and uplands included in forest cover	NA	NA	40	40	40
Acres of riparian <sup>b</sup> stream buffer reforested	NA	211	178	300	300
Ratio of dead or damaged street trees removed to trees replaced	1.5:1	0.63:1	0.38:1	0.66:1	0.66:1
Pollutant reductions achieved by tree canopy (\$000) <sup>c</sup>	NA	NA	34,146	34,200	34,200
Cost saving from stormwater runoff mitigation by tree canopy (\$000) <sup>d</sup>	NA	NA	428,648	428,700	428,700
<b>Service Quality:</b>					
Street tree maintenance frequency (years) <sup>e</sup>	49	82	77	30	30
Percentage of County with complete riparian/upland forest inventory	NA	100	100	100	100
Percentage of developed areas with tree canopy tracking in place	NA	75	80	100	100
<b>Efficiency:</b>					
Cost per tree for routine scheduled tree pruning (\$) <sup>f</sup>	86	71	47	70	70
<b>Workload/Outputs:</b>					
Street trees pruned per year	5,075	3,044	3,858	9,348	9,348
Street trees planted per year	891	<sup>g</sup> 1,725	<sup>g</sup> 1,702	<sup>g</sup> 1,520	<sup>g</sup> 1,520
Acres of upland forest protected	NA	745	449	500	500
Acres of riparian forest protected	NA	529	556	1,000	1,000
<b>Inputs:</b>					
Expenditures - Department of Environmental Protection (\$000) <sup>h</sup>	NA	265	<sup>i</sup> 261	266	266
Expenditures - Department of Public Works and Transportation (\$000) <sup>h</sup>	2,022	1,787	<sup>i</sup> 1,576	2,130	2,130
Workyears - Department of Environmental Protection	0	0.5	1.0	1.0	1.0
Workyears - Department of Public Works and Transportation	15.5	15.5	15.5	15.5	15.5

**Notes:**

<sup>a</sup>Urban/suburban acres achieving tree canopy percentages recommended in Countywide Forest Preservation Strategy.

<sup>b</sup>Riparian forests are wooded areas associated with streams or waterways; they usually reflect a certain species composition and wildlife community.

<sup>c</sup>This is the value in dollars of air pollution removed by tree canopy across the County.

<sup>d</sup>This is the value in dollars of stormwater runoff mitigation from the tree canopy (e.g. the saving in stormwater facilities that would otherwise be needed to handle the runoff intercepted by the tree canopy). The calculation is based on a typical 24-hour single storm event of an intensity expected to be encountered once every two years.

<sup>e</sup>The goal is to achieve a 5- to 7-year pruning cycle.

<sup>f</sup>The cost per tree is expected to decline once all street trees have received initial pruning on a 5- to 7-year cycle. Most street trees have never been pruned, and initial pruning needs are more extensive.

<sup>g</sup>Cost projections anticipated an average cost of \$100 per tree for planting. The actual average cost per tree for planting was \$109.82 in FY02 and \$111.63 in FY03; the cost per tree is expected to be \$124.92 in FY04 and FY05.

<sup>h</sup>The FY03 Department of Environmental Protection budget includes \$75,390 for staff and \$190,000 for street tree plantings. The Department of Public Works and Transportation budget covers costs for street tree maintenance, dead and hazardous tree removals, and stump removals.

<sup>i</sup>Actual expenditures were lower due to personnel on temporary leave-without-pay status for part of FY03.

<sup>j</sup>FY03 actual expenditures were lower than budgeted due to contributions to the budget savings plan.

**EXPLANATION:**

The County Executive's appointed Forest Preservation Task Force assessed the condition of the County's streamside and upland forests and urban tree canopy. The Task Force's October, 2000 final report recommended goals and action items to increase the quantity and improve the quality of forest and tree cover, restore and protect natural forest ecosystems, and enhance the condition of street trees in the County's most intensively developed urban and suburban areas. The community outcomes and program measures listed above reflect specific initiatives recommended by the Task Force and the estimated resources needed to achieve them.

The Countywide nature of these initiatives requires close coordination and resource allocations among a number of responsible agencies, integrated with the direct participation of volunteer and community groups. The staff and funding requirements listed are for Executive Branch agencies only. The Forest Preservation Task Force recognized that the Maryland-National Capital Park and Planning Commission (M-NCPPC) may also have resource requirements for improving subdivision reviews and other tree preservation activities related to the development permitting process and parks operations.

In the FY03 Actual measures listed above, M-NCPPC is credited with 449 acres of upland forest protection and 556 acres of riparian forest protection. The Maryland Department of Natural Resources (through the Conservation Reserve Enhancement Program) is credited with 85 acres of riparian forest protection. For riparian (stream buffer) reforestation, M-NCPPC planted 92 acres, and the Washington Suburban Sanitary Commission replanted 1 acre.

**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Department of Public Works and Transportation; Maryland-National Capital Park and Planning Commission; Washington Suburban Sanitary Commission; Board of Education; Audubon Naturalist Society; Izaak Walton League; Sierra Club; PEPCO; other business, environmental, and community groups.

**MAJOR RELATED PLANS AND GUIDELINES:** Montgomery County Forest Preservation Strategy (October 2000); Countywide Stream Protection Strategy (February 1998); Chesapeake 2000 Agreement goals for riparian forest buffer restoration.

## ENVIRONMENTAL PROTECTION

**PROGRAM:**

Watershed Management

**PROGRAM ELEMENT:**

Water and Wastewater Management and Planning

**PROGRAM MISSION:**

To plan for the timely, logical, economical, and environmentally sound provision of public water and sewer service to adequately satisfy County development/growth demands

**COMMUNITY OUTCOMES SUPPORTED:**

- Meeting consumer and business needs for cost-effective and timely public water and sewer service
- Provision of public water and sewer service consistent with Smart Growth objectives and County land-use plans
- Timely provision of public water and sewer service to relieve public health problems resulting from failed wells and septic systems
- Responsiveness to development industry needs by providing accurate and timely reviews of development plans and subdivision plats

**PROGRAM MEASURES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
<b>Service Quality:</b>					
Average time to complete plat reviews (days)	10	13	14	9	9
Average time to process map amendments (days):					
- Administrative delegation process - with hearing <sup>a</sup>	105	96	<sup>b</sup> 126	80	80
- Administrative delegation process - without hearing <sup>a</sup>	84	91	<sup>b</sup> 204	60	60
- County Council process	124	186	<sup>b</sup> 255	170	170
<b>Efficiency:</b>					
Development plans and plats reviewed per workyear	978	1,010	1,038	1,040	1,120
Average review cost per plan or plat (\$) <sup>c</sup>	77	74	76	86	87
<b>Workload/Outputs:</b>					
Development plans reviewed <sup>d</sup>	196	258	211	200	220
Record plats reviewed <sup>d</sup>	293	247	308	320	340
Map amendments reviewed	61	89	61	<sup>e</sup> 70	65
<b>Inputs:</b>					
Workyears (development plan and plat review)	0.5	0.5	0.5	0.5	0.5
Expenditures (development plan and plat review) (\$000) <sup>c</sup>	37.9	37.4	39.5	44.6	48.7

**Notes:**

<sup>a</sup>Under the administrative process, the County Council delegates to the Director of the Department of Environmental Protection the authority to grant Water and Sewer Plan amendments (usually service area category changes) under a limited set of circumstances as defined in the Plan.

<sup>b</sup>Increases in FY03 Actual review times reflect staff time diverted to (1) completing the triennial update of the Water and Sewer Plan, (2) addressing a substantial backlog of deferred Plan amendments in the Potomac Master Plan area, and (3) coordinating with the Maryland-National Capital Park and Planning Commission on three pending master plan revisions. This work resulted in fewer administrative actions and Council transmittals during the fiscal year. The Department of Environmental Protection expects to resume normal amendment schedules during FY04. (Note that the unusual increase in "without hearing" administrative review times - see the chart below - did not result in substantial delays in providing public water and/or sewer service to map amendment applicants. In those cases involving health problems and service from abutting mains, the Department is able to direct the Washington Suburban Sanitary Commission to provide restricted service to the properties.)

<sup>c</sup>The expenditures shown reflect staff resources exclusively.

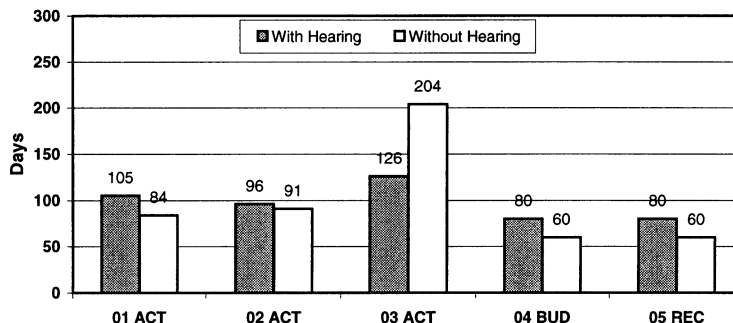
<sup>d</sup>FY04 projections reflect an anticipated reduction in plans and plats reviewed in keeping with the slowdowns experienced in the economy.

<sup>e</sup>The expected increase in map amendments reviewed for FY04 anticipates development interest spurred by the completion of master plans for Potomac, Upper Rock Creek, and Olney.

**EXPLANATION:**

In 1996 and 1999, the County modified Water and Sewer Plan policies for administrative delegation amendment actions, allowing some non-controversial amendments to bypass the public hearing process. These cases involved public health problems, properties abutting existing mains, non-policy text amendments, smaller on-site systems, and map corrections. The purpose of the non-hearing administrative process is to reduce review times for those map and text amendments which qualify, providing more efficient customer service. The non-hearing administrative actions are scheduled as needed, rather than on the quarterly schedule used for administrative hearings. Although review times have fluctuated from year to year (largely in response to overall work demands), the non-hearing review times are usually less than those for the hearing-based cases. Footnote "b" above addresses the increases in FY03 Actual review time shown in this chart.

**Average Time to Process Map Amendments:  
Administrative Delegation Process**



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Maryland-National Capital Park and Planning Commission, Washington Suburban Sanitary Commission, Department of Permitting Services, County Council, municipal governments, Maryland Department of the Environment and Office of Planning, local civic and environmental organizations, development industry.

**MAJOR RELATED PLANS AND GUIDELINES:** Montgomery County Comprehensive Water Supply and Sewerage Systems Plan, Montgomery County General Plan, local area master and sector plans, Washington Suburban Sanitary Commission guidelines and regulations, State law governing the preparation of and amendments to comprehensive water supply and sewerage systems plans.

## ENVIRONMENTAL PROTECTION

PROGRAM:		PROGRAM ELEMENT:																												
Watershed Management		Water Quality Monitoring; Stream Restoration																												
PROGRAM MISSION:																														
To protect citizens and improve the County's environment and quality of life by monitoring and restoring the County's streams and waterways																														
COMMUNITY OUTCOMES SUPPORTED:																														
• Protection and enhancement of the environment																														
• Enhanced quality of life through improved stream conditions																														
• Greater citizen and business environmental stewardship through direct participation in stream restoration initiatives																														
PROGRAM MEASURES		FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC																								
Outcomes/Results:																														
Percentage of CSPS <sup>a</sup> subwatersheds monitored during the fiscal year with increased (improved) rating <sup>b</sup>	NA	14.7	6.2	30	15																									
Percentage of CSPS subwatersheds monitored during the fiscal year with decreased (poorer) rating <sup>b</sup>	NA	35.3	20.6	20	20																									
Stream restoration miles with improved stream condition (cumulative)	6.0	10.9	11.6	18.2	22.3																									
Miles of CSPS priority subwatershed streams needing restoration <sup>c</sup>	308	303	302	296	292																									
Acres of stormwater controls added to developed areas (cumulative)	2,348	2,508	2,856	3,645	3,656																									
Developed acres with uncontrolled stormwater runoff	NA	NA	NA	TBD	TBD																									
Service Quality:																														
Percentage of watersheds with monitoring data accessible via the Web	100	100	100	100	100																									
Average time to design stream restoration projects (months)	24	25	28	24	24																									
Efficiency:																														
Stream monitoring cost per station (\$)	2,392	2,613	2,680	3,003	<sup>d</sup> 3,680																									
Workload/Outputs:																														
Stream stations monitored	97	93	97	97	<sup>d</sup> 69																									
Stream restoration miles in design	15.8	14.2	11.2	8.0	10.9																									
Stream restoration miles in construction	4.0	<sup>e</sup> 0.0	0.0	4.0	1.3																									
Stream restoration miles completed	1.1	5.1	0.7	5.6	4.1																									
Number of CSPS priority subwatersheds with project inventories completed	53	62	62	65	69																									
Number of CSPS priority subwatersheds with projects in design	24	<sup>f</sup> 15	21	15	8																									
Inputs:																														
Workyears <sup>g</sup>	5.5	5.5	5.5	5.5	<sup>d</sup> 4.2																									
Expenditures (\$000) <sup>g</sup>	232	243	260	291	335																									
CIP funding for watershed restoration (\$000)	1,560	2,612	1,830	3,642	7,579																									
Notes:																														
<sup>a</sup> CSPS = Countywide Stream Protection Strategy. See EXPLANATION below.																														
<sup>b</sup> Each year the Department of Environmental Protection monitors streams in about 20% of County watersheds, enabling a complete CSPS re-evaluation of stream conditions over a 5-year cycle.																														
<sup>c</sup> Staff estimates that 25% of the streams in priority subwatersheds are in need of restoration.																														
<sup>d</sup> Reflects some reallocation of stream monitoring workyears to accomplish other related County monitoring priorities. Since FY03, these new duties have gradually increased, reducing the total hours available for baseline monitoring of County streams in support of the CSPS. Baseline stream monitoring is done during discrete seasons, with approximately 1,480 hours per year being available for assigned staff to complete all field monitoring activities assigned during a given year. For FY05, staff estimates the needs for reallocating a portion of this time as follows: 104 hours to complete required NPDES permit monitoring; 80 hours to help conduct a pilot regional study to assess sources of bacterial contamination in the interjurisdictional Anacostia watershed; 80 hours to respond to periodically occurring sediment spills which require cleanup of streams and wetlands; 80 hours to monitor water bodies for potential mosquito infestations; 40 hours to respond to pollutant spills; 40 hours to assist in developing a comprehensive street tree inventory; and 80 hours to reintroduce native fish into Sligo Creek as part of ongoing restoration efforts in that watershed. This leaves an estimated 976 hours available for baseline stream monitoring in FY05, a 34% reduction from the 1,480 hours of previous years. This will result in 28 fewer baseline stream monitoring stations being visited in FY05, with a corresponding increase in the cost per station monitored. Although watershed coverage for updating the CSPS will not be quite as detailed as before, it will still be adequate for presenting a comprehensive assessment of countywide stream conditions.																														
<sup>e</sup> No new projects were under construction at the end of FY02, reflecting the diversion of staff to address other project priorities necessary to meet deadlines to secure a \$2 million grant.																														
<sup>f</sup> Primarily reflects the completion of all projects within 8 CSPS subwatersheds.																														
<sup>g</sup> Operating staff only. Excludes CIP workyears and funding.																														
EXPLANATION:																														
The Countywide Stream Protection Strategy (CSPS) ranks water quality conditions in all County streams. These rankings were used to identify 99 "priority subwatersheds" in need of restoration. The chart reflects the growth in CIP investments to design and construct stream restoration projects and new stormwater controls primarily targeted at improving the protection of streams in "priority subwatersheds." It is currently estimated that restoration of streams within priority watersheds will require about 19 years at current funding levels and implementation rates.		<div>Stream Restoration in Priority Subwatersheds</div> <table><thead><tr><th>Year</th><th>Design</th><th>Construction</th><th>Completed</th></tr></thead><tbody><tr><td>01 ACT</td><td>15.8</td><td>4.0</td><td>1.1</td></tr><tr><td>02 ACT</td><td>14.2</td><td>0.0</td><td>5.1</td></tr><tr><td>03 ACT</td><td>11.2</td><td>0.0</td><td>0.7</td></tr><tr><td>04 BUD</td><td>8.0</td><td>4.0</td><td>5.6</td></tr><tr><td>05 REC</td><td>10.9</td><td>1.3</td><td>4.1</td></tr></tbody></table>					Year	Design	Construction	Completed	01 ACT	15.8	4.0	1.1	02 ACT	14.2	0.0	5.1	03 ACT	11.2	0.0	0.7	04 BUD	8.0	4.0	5.6	05 REC	10.9	1.3	4.1
Year	Design	Construction	Completed																											
01 ACT	15.8	4.0	1.1																											
02 ACT	14.2	0.0	5.1																											
03 ACT	11.2	0.0	0.7																											
04 BUD	8.0	4.0	5.6																											
05 REC	10.9	1.3	4.1																											
PROGRAM PARTNERS IN SUPPORT OF OUTCOMES: Department of Permitting Services, Department of Public Works and Transportation, Maryland-National Capital Park and Planning Commission, Maryland Department of the Environment, Maryland Department of Natural Resources, U.S. Corps of Engineers, environmental groups, citizen groups, businesses.																														
MAJOR RELATED PLANS AND GUIDELINES: Countywide Stream Protection Strategy (CSPS); Montgomery County Strategic Plan for Water Quality Protection; Montgomery County Approved Capital Improvement Program; Water Quality Review law and regulations.																														